

## Manner Flexible PVC V903 NAT601

Manner Polymers - Flexible Polyvinyl Chloride

### General Information

#### Product Description

Recommended Applications: 105°C TW/THHW/THHN/THWN/THWN-2 insulation compound. V903 is UL QMTT2 recognized for THWN-2 on all wire sizes. CV903 meets VW-1, Oil Res I and sunlight resistance in all colors. This product complies with the European Union Restri

#### General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Sunlight Resistant		
Uses	• Insulation	• Wire & Cable Applications	
Agency Ratings	• UL I Oil Rating	• UL Type THHW	• UL Type TW
	• UL QMTT2	• UL Type THWN	• UL VW-1
	• UL Type THHN	• UL Type THWN-2	
Appearance	• Natural Color		

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.29 to 1.33		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus - 100% Secant <sup>2</sup>	2200	psi	ASTM D638
Tensile Strength <sup>2</sup>	3400	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	350	%	ASTM D638
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore C	77 to 83		
Shore C, 10 sec	67 to 73		
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	5.00	°F	ASTM D746
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air <sup>3</sup> (277°F, 168 hr)	-4.0	%	UL 1581
Change in Ultimate Elongation in Air <sup>3</sup> (277°F, 168 hr)	-5.0	%	UL 1581
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	3.0E+18	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Oxygen Index	30	%	ASTM D2863

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Unaged Dumbbell: .03 inch

<sup>3</sup> Air Aged: .03 inch

